DOCUMENT RESUME

ED 447 846 JC 010 010

AUTHOR	Janicki, Heidi
TITLE	Tidewater Community College Biennial Transfer Student Report, 1996-97 and 1997-98 Academic Years.
INSTITUTION	Tidewater Community Coll., Portsmouth, VA.
PUB DATE	2000-08-00
NOTE	20p.
AVAILABLE FROM	For full text: http://www.tc.cc.va.us/admin/ir/irreport.htm.
PUB TYPE	Reports - Research (143)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	*Academic Achievement; *College Transfer Students; Community Colleges; Higher Education; *Outcomes of Education; *Transfer Rates (College)
IDENTIFIERS	*Tidewater Community College VA

ABSTRACT

This report provides an analysis of Tidewater Community College (TCC) (Virginia) students who transferred to a four-year institution in Virginia beginning in fall 1996 or 1997. The following topics are discussed: overview of the transfer process; acceptance and enrollment rates for each of the four-year institutions; performance of TCC graduates and non-graduates; performance at transfer institutions; relationship between ethnicity and acceptance, enrollment, and performance; relationship between developmental education at TCC and subsequent performance at the transfer institution; and student perceptions of the transfer process. Results show that overall, TCC students who transferred to a four-year institution felt that the transition was uncomplicated. The majority of students reported that all of their TCC credit hours were accepted. Students also felt that they were well prepared for the demands of a four-year institution. GPA performance data from four-year institutions showed that TCC transfer students were successful. The majority of TCC students transferred locally to Old Dominion University (ODU) (64%). Forty-nine percent of these students earned a grade point average (GPA) of 3.0 or greater at ODU. TCC's transfer students perform at a similar academic level compared to ODU's nontransfer students. The average GPA of TCC's transfer students at ODU was 2.76, and the average GPA of ODU's nontransfer students was 2.57. Performance at many other four-year institutions was also above average. (VWC)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 447 846

TIDEWATER COMMUNITY COLLEGE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
Heidi Janicki
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Biennial Transfer Student Report

1996-97 and 1997-98 Academic Years

Office of Student Outcomes Assessment

August 2000

TC010010

BEST COPY AVAILABLE

TIDEWATER COMMUNITY COLLEGE

Biennial Transfer Student Report

1996-97 and 1997-98 Academic Years

Office of Student Outcomes Assessment
Tidewater Community College
121 College Place
Norfolk VA 23510

August 2000

TABLE OF CONTENTS

INTRODUCTION _____ 1

OVERVIEW OF THE TRANSFER PROCESS _____ 2

ACCEPTANCE AND ENROLLMENT RATES _____ 5

TCC GRADUATES VS. NON-GRADUATES _____ 7

TCC CURRICULUM _____ 8

ETHNICITY _____ 9

DEVELOPMENTAL EDUCATION AT TCC _____ 11

TRANSFER SURVEY _____ 13

CONCLUSION _____ 14

FIGURES

FIGURE 1. 1996-1998 Transfers by Institution ____ 2
FIGURE 2. Transfer Majors at the Four-Year Institutions ____ 3
FIGURE 3. Transfer Student GPA by Institution ____ 4
FIGURE 4. 1996-1998 Acceptance Rates of TCC Students ____ 5
FIGURE 5. 1996-1998 Enrollment of Accepted TCC Students ____ 6
FIGURE 6. TCC Grade Point Averages of Applicants ____ 6
FIGURE 7. TCC Average Credit Hours of Applicants ____ 6
FIGURE 8. TCC Curricula Before Transfer ____ 8
FIGURE 9. TCC Curricula and GPA ____ 8
FIGURE 10. Ethnicity and Transfer Application ____ 9
FIGURE 11. Ethnicity and Acceptance Rates ____ 10
FIGURE 12. Ethnicity and Enrollment of Accepted Transfers ____ 10
FIGURE 13. Ethnicity and Transfer Student GPA ____ 11
FIGURE 14. Grades in English Courses at NSU ____ 12
FIGURE 15. Grades in Mathematics Courses at NSU ____ 13

TABLES

TABLE 1. Students Earning a GPA of 3.00 or Greater ____ 4
TABLE 2. Graduate GPA vs. Non-Graduate GPA ____ 7
TABLE 3. GPA of Graduates and Non-Graduates by Degree Program ____ 7
TABLE 4. TCC Program and GPA ____ 9
TABLE 5. Developmental English and GPA ____ 11
TABLE 6. Developmental Mathematics and GPA ____ 12
TABLE 7. Preparation for Demands of Four-year Institution ____ 14

BIENNIAL TRANSFER STUDENT REPORT
1996-97 AND 1997-98 ACADEMIC YEARS

INTRODUCTION

According to several sources, the majority of students who attend Tidewater Community College (TCC) intend to transfer to another college or university. For example, in the 1999 ACT Student Opinion Survey, 54% of TCC students indicated that their purpose for entering TCC was to complete courses necessary for transfer to a four-year institution. Additionally, according to the 1999 Transfer Survey, 74% of TCC students who transferred to a four-year institution indicated that their primary educational objective when first enrolling at TCC was to prepare to transfer. Part of TCC's mission core is to prepare these students for successful completion of a baccalaureate degree. As one indicator of accountability, preparation is measured by student outcomes at the transfer institution.

In order to address TCC's effectiveness in preparing students for transfer, performance data from the transfer institutions must be shared with TCC. To encourage this process, the State Council of Higher Education for Virginia (SCHEV) established Guideline 8. Guideline 8 sets forth standards that facilitate information sharing between four-year institutions and community colleges. Guideline 8 specifies that all four-year institutions should provide transfer student data to the previously attended two-year institution. On an aggregate level, four-year institutions are required to provide data about acceptance and enrollment rates. Data on individual students enrolled at the four-year institution should also be provided. This includes data on the student's major at the four-year institution, the number of credit hours accepted from the community college, the number of credit hours attempted and earned at the four-year institution, and the cumulative grade point average (GPA). In addition, data on courses taken at the four-year institution and the student's performance in each course should be included.

This transfer report provides an analysis of TCC students who transferred to a four-year institution in Virginia beginning in fall 1996 or fall 1997. In order to determine the impact that a student's education at TCC had on his or her performance at the four-year institution, certain conditions must have been met for a student to be considered a transfer student and represented in this analysis. First, the student who transferred to a four-year institution must have completed a minimum of 12 credit hours at TCC. Second, the student must have been enrolled at TCC during the year immediately preceding transfer to the four-year institution. For example, students entering a four-year institution in fall 1996 must have been enrolled at TCC between summer 1995 and summer 1996. Similarly, students entering a four-year institution in fall 1997 must have been enrolled at TCC between summer 1996 and summer 1997.

The Transfer Report has two components. The first and largest component is based on performance data provided by the four-year institutions. The second component is based on a survey of transfer students. This transfer survey allows the students' perspectives on the transfer process to be examined. It should be noted that the data from the four-year institutions are not necessarily from the same sample of students who responded to the transfer survey. The transfer survey was mailed only to those students who entered a four-year institution in fall 1997. However, the two components together provide a broader perspective from which to examine the transfer process.

A number of issues will be addressed in this report. First, an overview of the transfer process will be presented including the number of students who transferred and the institutions to which they transferred. Second, acceptance and enrollment rates for each of the four-year institutions will be provided. Third, the performance of TCC graduates and non-graduates will be compared. This section will focus on whether graduates are better prepared for successful transfer compared to non-graduates. Fourth, students' curricula at TCC and their performance at the transfer institutions will be examined. This section will address whether students enrolled in transfer programs (AA or AS) are better prepared for transfer compared to students enrolled in occupational/technical programs (AAS or certificates). Another issue that will be examined is the relationship between ethnicity and acceptance, enrollment, and performance at four-year institutions. The relationship between developmental education at TCC and subsequent performance at the transfer institution will also be presented. This section will focus on how students who took developmental mathematics or developmental English courses performed compared to those who did not take developmental courses at TCC. Finally, the results of the transfer survey that focuses on student perceptions of the transfer process will be summarized.

OVERVIEW OF THE TRANSFER PROCESS

As mentioned previously, a transfer student, as defined for this report, is one who completed a minimum of 12 credit hours at TCC, attended TCC within the year prior to transfer, and enrolled in courses at the four-year institution. Based on this definition, there were 479 transfer students for the 1996-97 academic year and 392 transfer students for the 1997-98 academic year. Therefore, this report will concentrate on a total of 871 students who transferred from TCC during the 1996-1998 time period. An additional 264 students applied for transfer but did not enroll at a four-year institution.

Of the 15 four-year institutions required to report transfer data to TCC, 11 institutions provided data concerning students who enrolled at their institution. The largest number of TCC students transferred to Old Dominion University (ODU). Norfolk State University (NSU) was the second largest transfer institution. The percentage of TCC students who transferred to each of the 11 reporting four-year institutions is summarized in Figure 1.

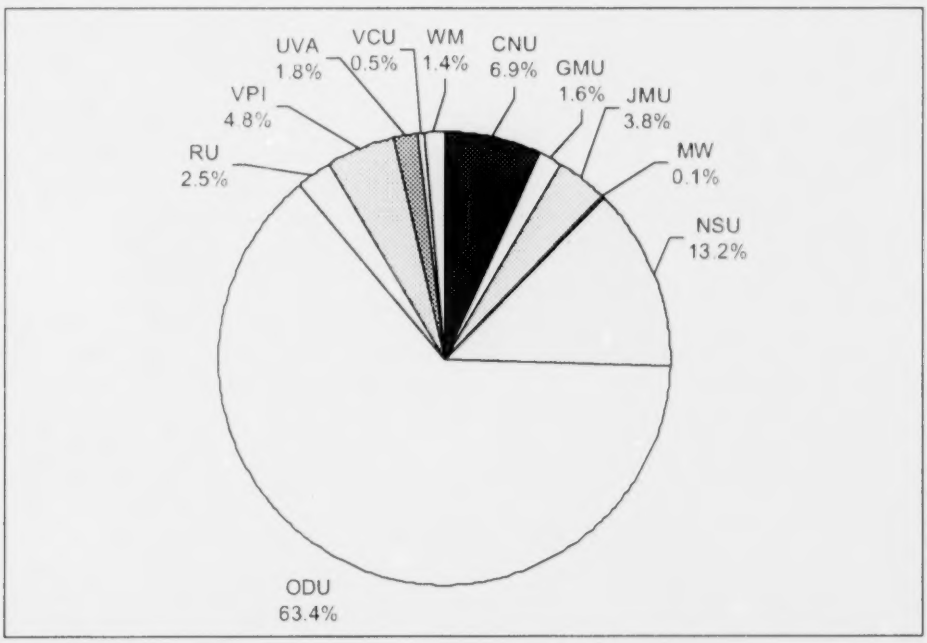

FIGURE 1. 1996-1998 Transfers by Institution

TCC transfer students were enrolled in several degree programs before transfer. The Associate in Arts (AA) and Associate in Science (AS) degree programs are designed to prepare students for transfer. The Associate in Applied Science (AAS) degree programs and certificate programs can also lead to transfer, although they are occupational/technical programs designed to prepare students for specific career fields. Overall, the majority of students (67%) were enrolled in an AS degree program before transfer. Thirteen percent (13%) of transfers were enrolled in an occupational/technical program (AAS or certificate), 11% were enrolled in an AA degree program, and 9% were unclassified.

After transferring to a four-year institution, TCC students declared 94 different majors. An additional 13% of students were undecided. The most frequently declared major was Interdisciplinary Studies (9%), followed by Nursing (6%) and Engineering (6%). Figure 2 charts the majors declared by at least 2% of students.

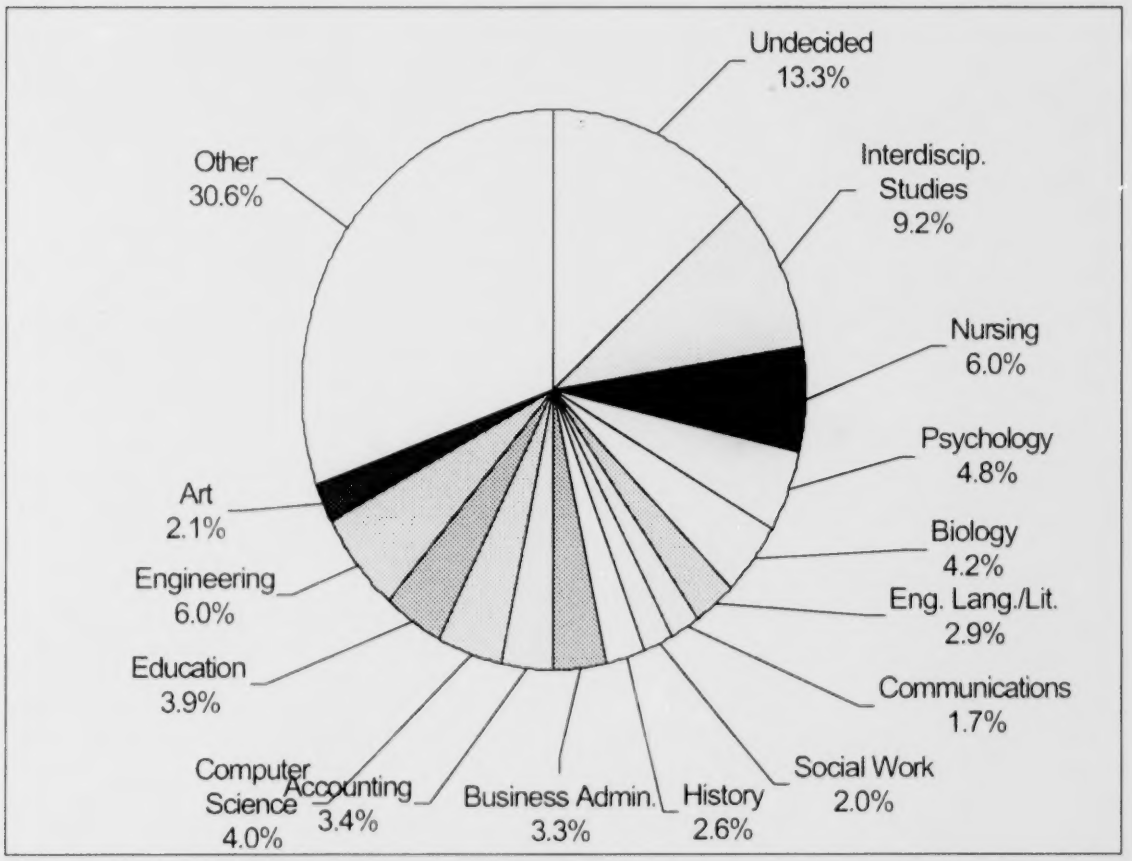

FIGURE 2. Transfer Majors at the Four-Year Institutions

After transferring to a four-year institution, the average GPA at all institutions was at least 2.00. At the majority of institutions, performance was similar to performance at TCC. Students at the University of Virginia (UVA), The College of William and Mary (WM), and James Madison University (JMU) showed the greatest average change in GPA after transferring. Figure 3 details average performance at TCC, the transfer institutions, and the change in GPA.

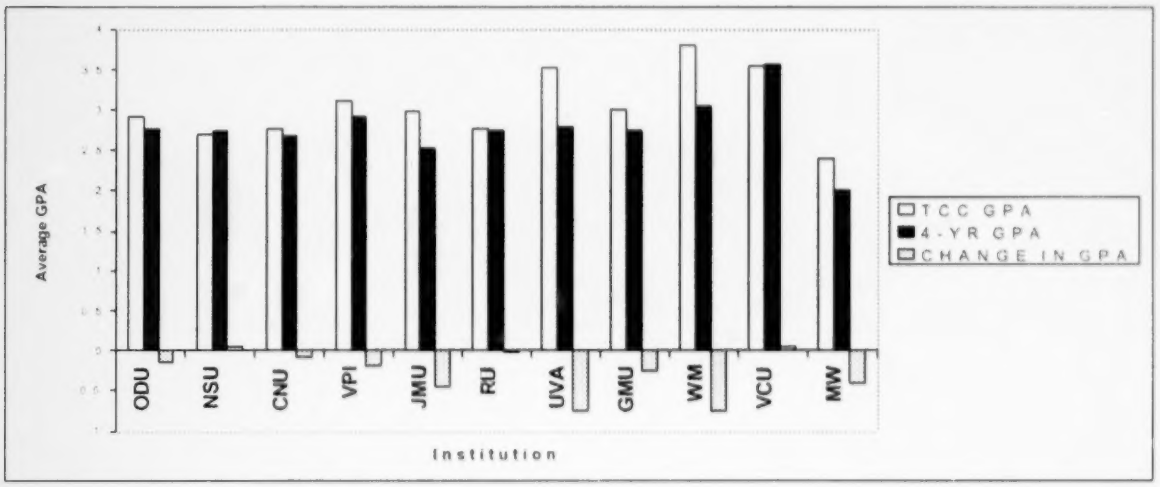

FIGURE 3. Transfer Student GPA by Institution

At half of the reporting four-year institutions, the majority of transfer students earned a 3.00 GPA or better. ODU and NSU, which account for approximately 75% of the transfer students, reported that 48% and 54% of TCC students, respectively, earned a 3.00 GPA or greater.

TABLE 1

Students Earning a GPA of 3.00 or Greater		
Institution	Percent	Total # of Students*
ODU	48%	482
NSU	54%	114
CNU	33%	57
VPI	57%	42
JMU	24%	33
RU	41%	22
UVA	44%	16
GMU	50%	14
WM	64%	11
VCU	100%	4

* The total number of students at each transfer institution will not add to the total number of students who transferred due to missing GPA data. The number indicates students with valid GPA information.

Due to the fact that the majority of TCC students transfer to ODU, the performance of these students compared to the performance of ODU's native students is especially important. It is difficult to directly compare performances of native ODU students and TCC students who transfer to ODU due to various factors that can influence GPA, such as a student's class standing, the curriculum in which the student is enrolled, and the number of credit hours completed. However, it is important to note that the performance of students who transfer to ODU from TCC is similar to that of students who began their

education at ODU. During their first year at ODU, the average GPA for former TCC students was 2.76. According to information provided by ODU, the average GPA for all ODU native students as of fall 1999 was 2.57.

ACCEPTANCE AND ENROLLMENT RATES

Of the 11 institutions providing transfer data, only five (NSU, RU, VPI, VCU, and WM) provided complete data concerning acceptance and enrollment rates. Two other institutions (ODU and UVA) provided acceptance and enrollment data for one of the two academic years included in this report. It should be noted that with acceptance and enrollment data missing from a number of institutions, accurate acceptance and enrollment statistics are difficult to present.

Overall, 1135 TCC students applied for transfer to a four-year institution. Of these students, 871 (77%) actually enrolled at the transfer institution. There are two reasons why 23% of the students did not enroll. First, they may have been accepted and chose not to attend. Second, they could have been denied acceptance. An overall enrollment rate based on those students who were accepted cannot be determined due to missing data. Similarly, an overall acceptance rate cannot be determined.

However, acceptance and enrollment rates based on the complete data from five institutions and partial data from two institutions can be presented. Of the institutions providing data, 87% of TCC students who applied were accepted. Figure 4 offers a detailed depiction of acceptance rates at each of the institutions reporting acceptance data. ODU and NSU have the highest acceptance rates of TCC students, while Virginia Tech (VPI) and UVA have the lowest acceptance rates.

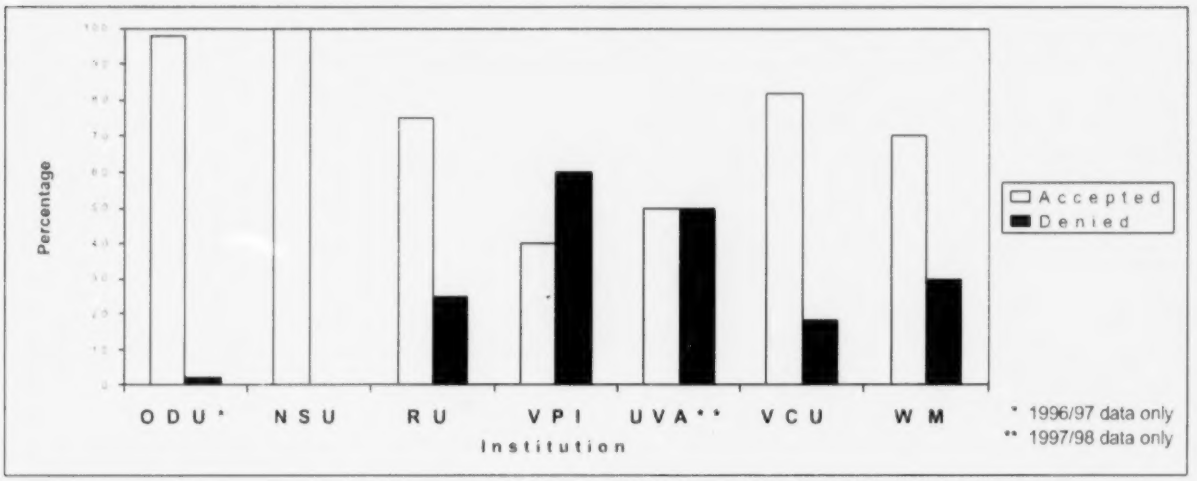

FIGURE 4. 1996-1998 Acceptance Rates of TCC Students

Of the students who were accepted, 78% enrolled at a four-year institution. Figure 5 displays the enrollment rates of students who were accepted at each of the institutions reporting enrollment data. As depicted, VPI had the highest enrollment rate with 100% of accepted students enrolling. Virginia Commonwealth University (VCU) showed the lowest enrollment rate among students who were accepted.

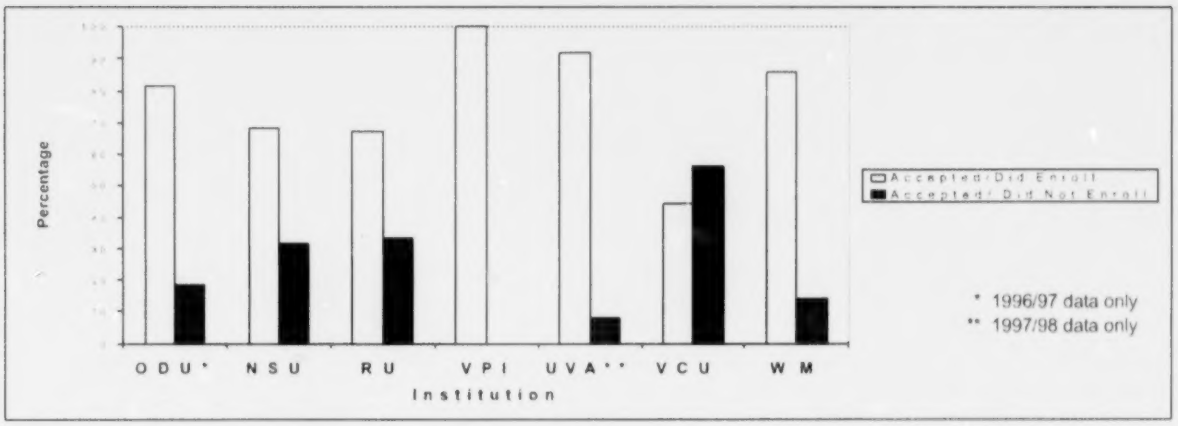

FIGURE 5. 1996-1998 Enrollment of Accepted TCC Students

A number of factors could influence whether a TCC student is accepted for transfer. Have students engaged in an appropriate program of study to successfully compete for admission to the transfer institution? Does GPA or the number of credit hours taken at TCC influence acceptance rates? How do acceptance rates for graduates of TCC compare with those of non-graduates? The answers to these questions are important if TCC is to provide academic experiences that will result in students reaching the goal of transferring to a four-year institution.

Acceptance to a four-year institution was correlated with a student's GPA at TCC (r=.09, p<.01) and the number of credit hours completed at TCC (r=.14, p<.01), although these correlations were weak. As students' GPA and number of completed credit hours increased, their likelihood of being accepted increased. Figure 6 depicts the relationship between acceptance and GPA, while Figure 7 depicts the relationship between acceptance and number of credit hours completed.

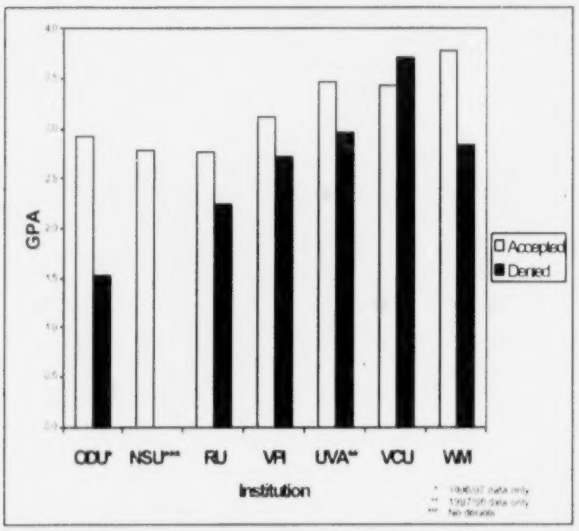

FIGURE 6. TCC Grade Point Averages of Applicants

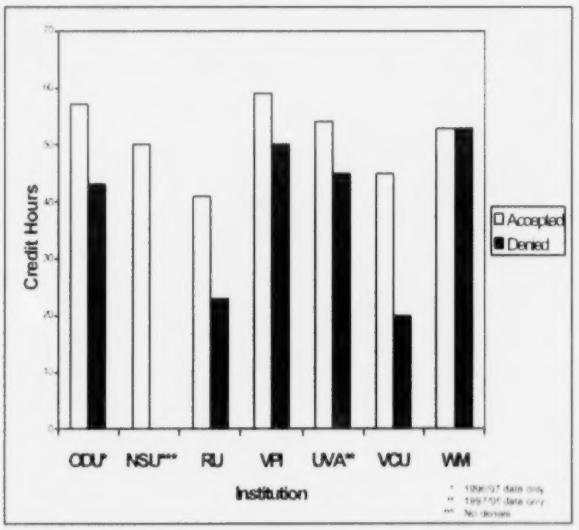

FIGURE 7. TCC Average Credit Hours of Applicants

Of the students applying for transfer with acceptance/denial data, 22% (n=250) were TCC graduates while 78% (n=868) were non-graduates. The overall acceptance rate for graduates was 92%

compared to 91% for non-graduates, although this difference was not statistically significant. Based on the acceptance data, it may be more important for students to enroll in appropriate transfer courses, do well in those courses, and accumulate credit hours than it is for students to graduate with a degree.

TCC GRADUATES VS. NON-GRADUATES

Data from the four-year institutions showed that 77% of TCC students who transferred were not graduates. Less than one-fourth (23%) of students who transferred completed a degree at TCC. While the majority of transfers were non-graduates, an important question is whether non-graduates and graduates perform similarly at the four-year institutions or whether graduates have an advantage in terms of earning higher GPAs at the transfer institution. Overall, data showed that graduates had a significantly higher average GPA at the four-year institutions (2.90) compared to non-graduates (2.71), $t(794)=2.6$, $p<.01$. Table 2 shows the number of graduates and non-graduates at each transfer institution along with the average GPA earned at the four-year institution.

TABLE 2

Graduate GPA vs. Non-Graduate GPA

Institution	Graduate GPA	# of Graduates*	Non-Graduate GPA	# of Non-Graduates*
CNU	2.96	16	2.57	41
GMU	2.62	7	2.88	7
JMU	2.75	7	2.47	26
MW	----	0	2.00	1
NSU	3.07	27	2.65	87
ODU	2.88	102	2.72	380
RU	2.39	3	2.80	19
VPI	3.08	12	2.86	30
UVA	2.16	4	2.98	12
VCU	----	0	3.57	4
WM	3.28	6	2.78	5

* Numbers will not add to the total number of transfers due to missing GPA information for some students.

A more detailed examination of how graduates and non-graduates performed includes the type of degree program in which the student was enrolled while at TCC. The two transfer degrees offered by TCC are the Associate in Arts (AA) degree and the Associate in Science (AS) degree. TCC also offers occupational/technical education comprised of the Associate in Applied Science (AAS) degree and certificate programs. Table 3 presents GPA information for graduates and non-graduates of the college transfer degree programs and occupational/technical programs.

TABLE 3

GPA of Graduates and Non-Graduates by Degree Program

Status	AA	AS	AAS/certificates
Four-year GPA			
Graduate	3.08 (n=22)	2.88 (n=120)	2.86 (n=40)
Non-Graduate	2.81 (n=70)	2.68 (n=416)	2.72 (n=53)
TCC GPA			
Graduate	3.10 (n=22)	2.97 (n=120)	3.12 (n=40)
Non-Graduate	2.85 (n=70)	2.87 (n=416)	2.91 (n=53)

TCC CURRICULUM

TCC students were enrolled in various curricula before transferring to a four-year institution. The greatest portion of transfers (20%) was enrolled in the Science/ Computer Science curriculum before transferring. Business Administration (17%) and Education (16%) curricula also showed relatively high enrollment. Figure 8 offers a complete picture of enrollment patterns in TCC curricula before transfer. The unclassified category, as shown in Figure 8, includes coursework for personal satisfaction, career exploration, upgrading employee skills, and non-degree transfer.

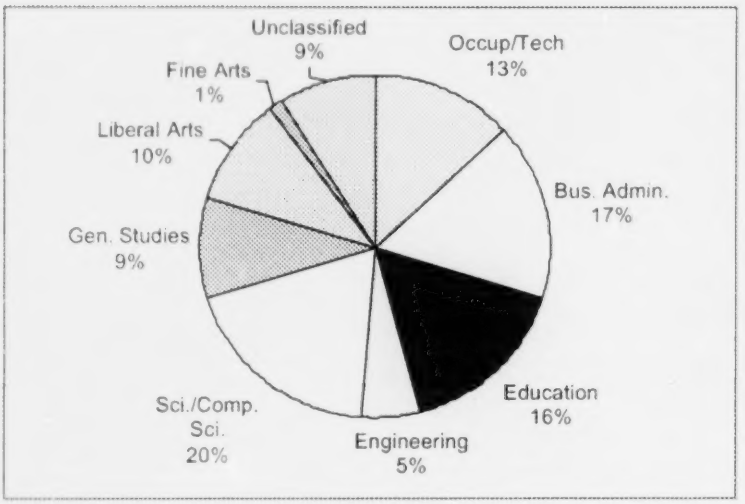

FIGURE 8. TCC Curricula Before Transfer

An important question is how enrollment in various curricula prepares TCC students for successful transfer to four-year institutions. Figure 9 illustrates how GPA at TCC and at the four-year institution varies depending on a student's curriculum while attending TCC. The current educational literature describes an average GPA change of –0.5, known as "transfer shock," when a community college student transfers to a four-year institution (Diaz, 1992). The average GPA change for TCC students was significantly lower than the national average. In fact, students transferring in the Fine Arts and General Studies curricula exceeded the average TCC GPA, and students in the Liberal Arts and Education curricula experienced a drop of less than 0.1.

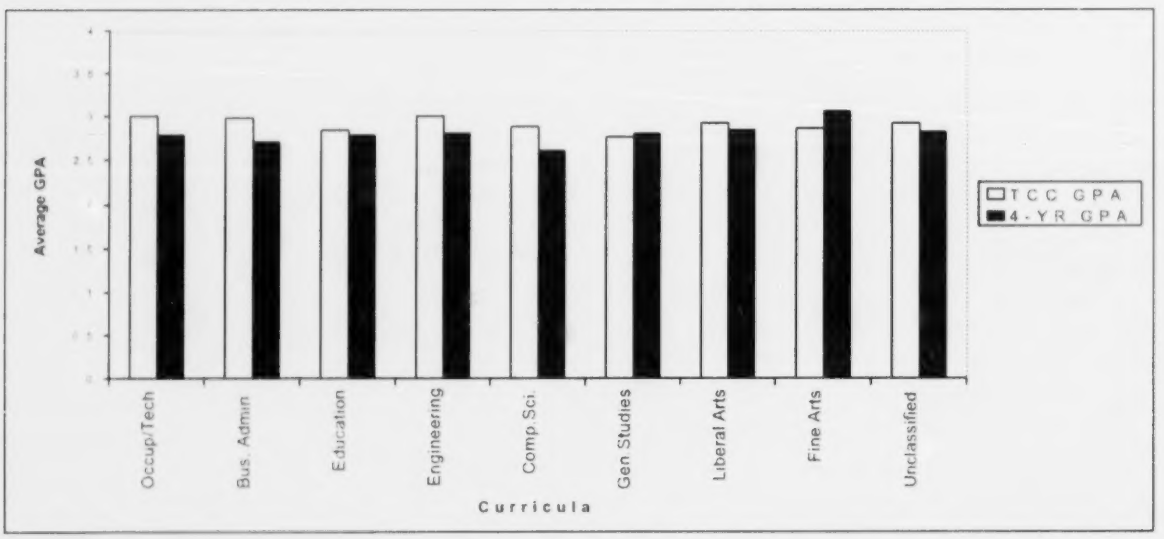

FIGURE 9. TCC Curricula and GPA

Overall, students enrolled in the occupational/technical programs (AAS and certificates), AS degree programs, and AA degree programs performed similarly after transferring. Table 4 depicts the data.

TABLE 4

TCC Program and GPA		
Program	TCC GPA	4-YR GPA
AAS/Cert.	3.00	2.78
AA	2.91	2.88
AS	2.89	2.72

ETHNICITY

In the past, the Transfer Report included a section examining ethnicity with regard to the transfer process. The present report will continue this analysis. Specifically, this section will address questions focused on the ethnicity of TCC transfers, acceptance and enrollment rates associated with different ethnic groups, and performance by various ethnic groups at the four-year institutions.

As mentioned previously, a number of schools did not provide data concerning students who applied for transfer but were not accepted or those who were accepted but did not enroll. Because of this lack of data, statistics concerning applications to transfer institutions, acceptance rates, and enrollment rates will be skewed. The following results are based on data from 11 schools reporting data on TCC students. Only five of those schools provided complete data concerning acceptance rates and enrollment rates, while two schools provided data for one of the two academic years addressed in this report. All available data were analyzed due to the specific focus on transfer students' ethnic backgrounds. Keeping the limitations of the data in mind, information provided by the four-year institutions can give a general picture of how ethnicity relates to the transfer process.

The following chart illustrates the ethnic background of TCC students who applied to a four-year institution. The large majority (74%) of TCC students applying for transfer was Caucasian. The next largest group, comprising 14% of students applying for transfer, was African-American students.

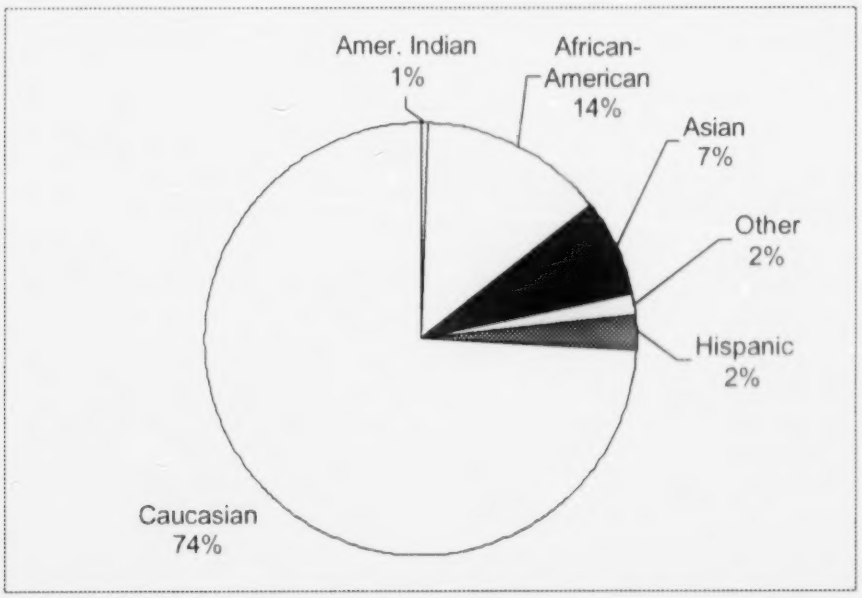

FIGURE 10. Ethnicity and Transfer Application

FIGURE 11. Ethnicity and Acceptance Rates

Acceptance rates for various ethnic groups varied from 100% for American Indian students to 85% for Asian students. Acceptance rates for students in each of the ethnic groups are presented in Figure 11.

Although acceptance rates were relatively high, enrollment rates were somewhat lower. The enrollment rates for students who were accepted are presented in Figure 12.

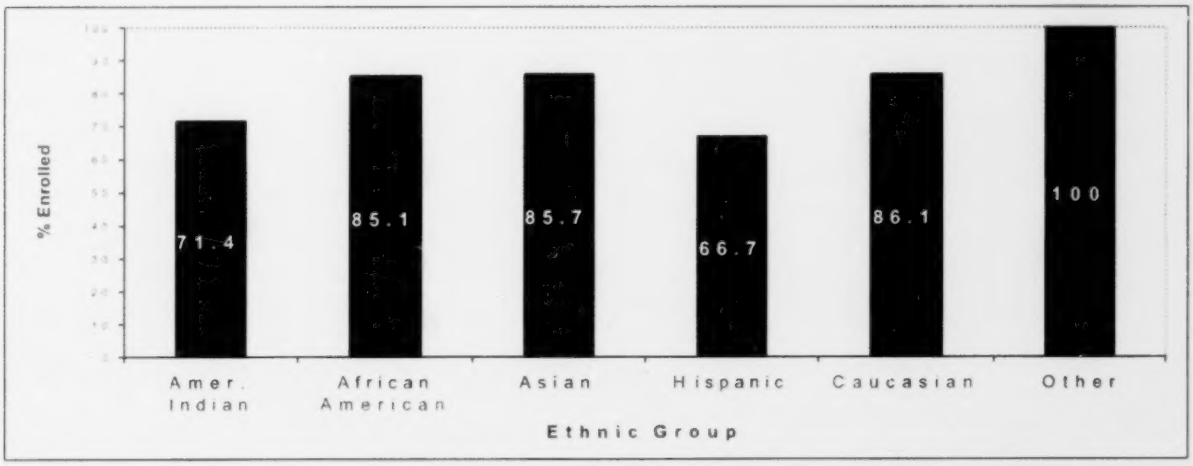

FIGURE 12. Ethnicity and Enrollment of Accepted Transfers

How do TCC students from various ethnic groups perform at their transfer institution? This question is important in determining if TCC adequately prepares all students for successful transfer. Figure 13 displays TCC GPA and GPA at the transfer institution depending on ethnicity.

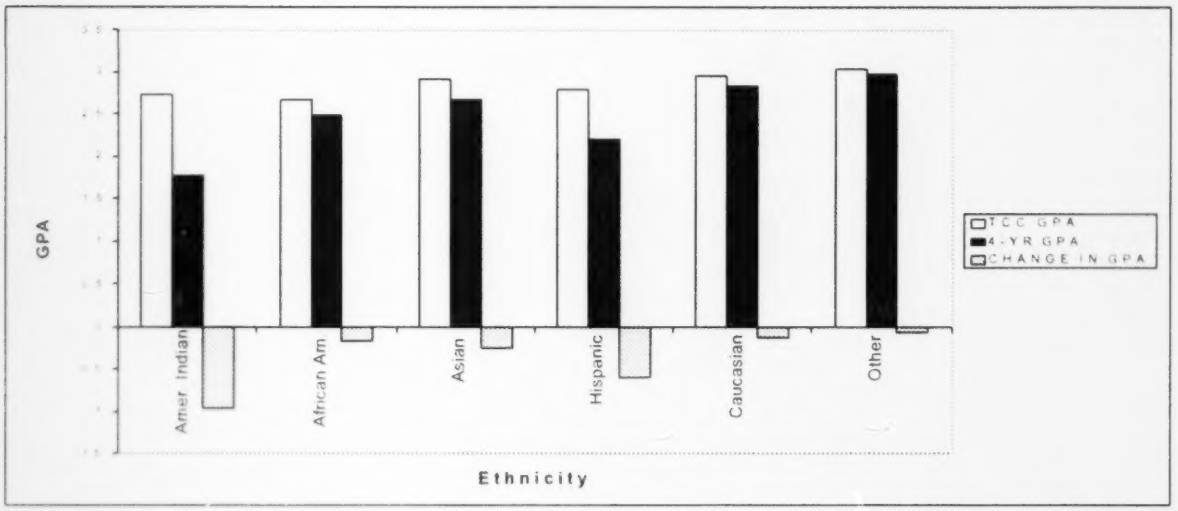

FIGURE 13. Ethnicity and Transfer Student GPA

As indicated, American Indian and Hispanic transfer students experienced the greatest decline in GPA following transfer to a four-year institution. Other groups exhibited a smaller decline.

DEVELOPMENTAL EDUCATION AT TCC

The majority of students (64%) completed developmental English or developmental mathematics at TCC before transferring to a four-year institution. Nearly one-third of TCC transfer students enrolled in developmental English (31%), while over half of TCC transfer students enrolled in developmental mathematics (59%). One-quarter of transfer students (25%) were enrolled in both developmental English and developmental mathematics at TCC. Slightly more than one-third of students (35%) did not enroll in either of the developmental courses. Depending on whether developmental English was taken, a comparison of GPA at TCC and the transfer institutions is shown below.

TABLE 5

Developmental English and GPA			
Status	TCC GPA	4-YR GPA	Change
Enrolled in Developmental English at TCC	2.72	2.60	.12
Not Enrolled in Developmental English at TCC	3.00	2.82	.18

As indicated in Table 5, students who did not take developmental English at TCC had a slightly higher cumulative GPA at TCC and also had a slightly higher GPA at the four-year institution. However, students who took developmental English experienced less of a change in GPA after transferring to a four-year institution.

In order to compare performance in English courses after transfer, an examination of performance in English courses at NSU follows. Although ODU is the institution where the majority of TCC students transferred, no data were available concerning courses that TCC students completed at ODU. NSU was the second largest transfer institution, and course information was available. After transferring, 61 TCC students enrolled in an English course at NSU. Of these 61 students who enrolled in an English course at NSU, 36 students did not take developmental English at TCC while 25 students did take developmental English. Figure 14 shows the percentage of students receiving various grades in English courses depending on whether they enrolled in developmental English.

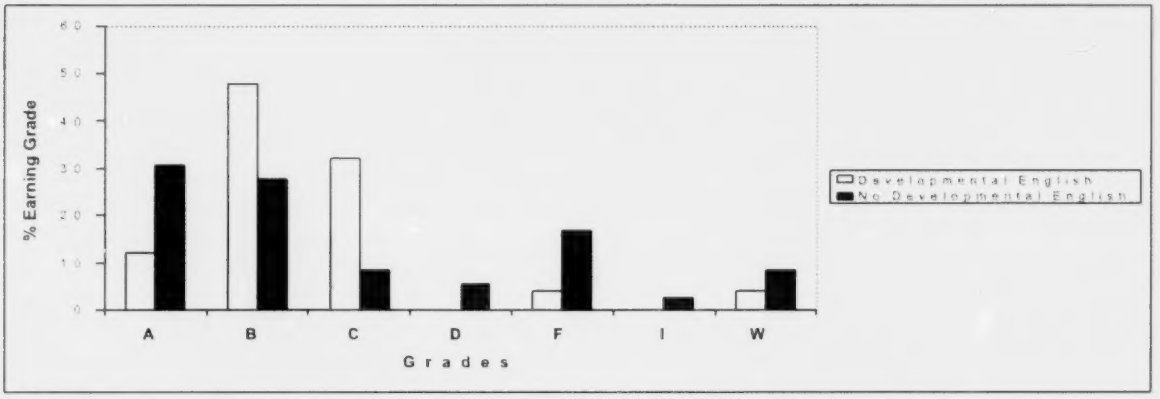

FIGURE 14. Grades in English Courses at NSU

As illustrated, a greater percentage of students who did not enroll in developmental English received A grades at NSU. However, a greater percentage of these students also received D or F grades or did not complete the course. A greater percentage of students who took developmental English completed English courses at NSU with grades of B and C.

As discussed previously, the majority of students took developmental mathematics at TCC. Depending on whether developmental mathematics was taken, a comparison of GPA at TCC and the transfer institutions is shown below.

TABLE 6

Developmental Mathematics and GPA			
Math Status	TCC GPA	4-YR GPA	Change
Enrolled in Developmental Math at TCC	2.86	2.72	.14
Not Enrolled in Developmental Math at TCC	2.99	2.81	.18

As indicated in Table 6, students who did not take developmental mathematics and students who did take developmental mathematics at TCC performed similarly at both TCC and the transfer institution. Students who took developmental mathematics experienced less of a change in GPA after transferring, but this difference was slight.

In order to compare performance in mathematics courses after transfer, an examination of performance in mathematics courses at NSU follows. After transferring, 65 TCC students enrolled in a mathematics class at NSU. Of these 65 students who enrolled in a mathematics class at NSU, 22 students did not take developmental mathematics at TCC while 43 students did take developmental mathematics. Figure 15 shows the percentages of students receiving various grades in mathematics courses depending on whether they enrolled in developmental mathematics.

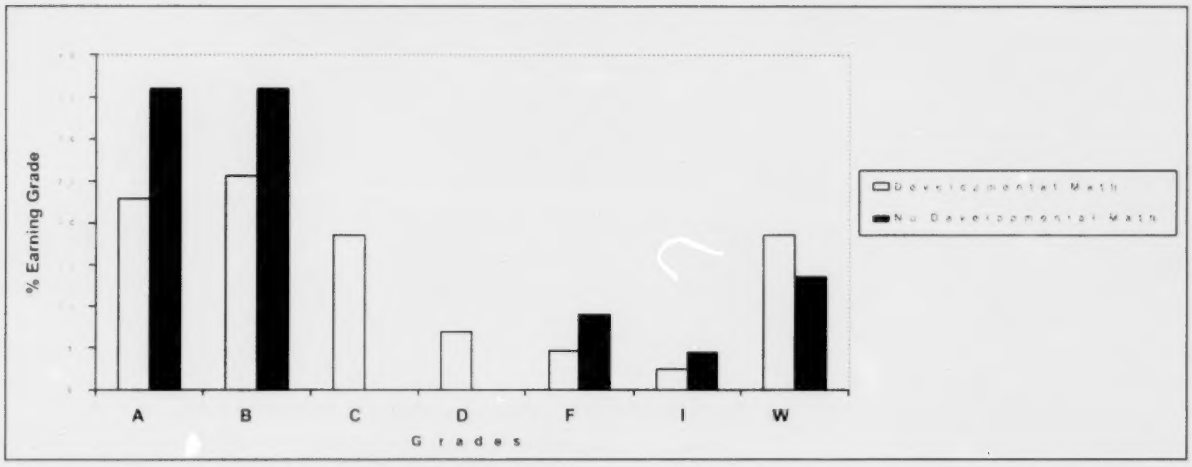

FIGURE 15. Grades in Mathematics Courses at NSU

As depicted above, a greater percentage of students not taking developmental mathematics received grades of A and B. However, a greater percentage of these students also received F grades compared to those who took developmental mathematics. A greater percentage of students who took developmental mathematics at TCC received grades of C or D at NSU.

TRANSFER SURVEY

In addition to data received from four-year institutions, TCC attempts to obtain student perceptions of the transfer process. During the spring 1999 semester, surveys were mailed to students who transferred in fall 1997. This allowed ample time for transfer students to reflect on their education at TCC and how well it prepared them for successful performance at the four-year institution. Completed surveys were received from 359 students.

Approximately 74% of students responding to the survey indicated that their primary educational objective at TCC was to prepare for transfer to a four-year institution. For 80% of these students, their primary objective did not change while they were enrolled at TCC. After completing their coursework at TCC, the majority of students (67%) applied for transfer to one institution. Several students applied to two (15%) or three institutions (8%). Students applying for transfer usually were able to attend the college of their first choice. Seventy-eight percent (78%) of students indicated that the college they attended was their first choice, while 10% indicated it was their second choice.

Perceptions of the transfer process were generally positive. The majority of respondents (73%) reported that all of their TCC credits were accepted at the transfer institution, and 89% of students indicated that there were no major problems associated with the transfer. Regarding students' perceptions of their preparation for the academic environment of a four-year institution, 89% of respondents indicated that they felt prepared. The survey also questioned students about TCC's proficiency in preparing them for various demands of a four-year institution. Table 7 displays the percentages of students who felt that TCC was excellent, very good, and good at preparing them for the various demands.

TABLE 7

Preparation for Demands of Four-year Institution

Demand of 4-yr Institution	Excellent	Very Good	Good	Total Prepared
Difficulty/Amount of Reading	15%	32%	39%	86%
Writing Skills	15%	34%	38%	87%
Vocabulary	14%	33%	42%	89%
Speaking Skills	19%	35%	36%	90%
Study Skills/Study Habits	16%	29%	40%	85%
Math Skills	23%	34%	32%	89%
Critical Thinking	18%	36%	33%	87%
Computer Skills	21%	29%	34%	84%
Problem Solving Skills	18%	33%	35%	86%

Overall, 25% of students felt that TCC was excellent at preparing them for the transfer to a four-year institution. Additionally, 42% of students felt that TCC was very good, and 27% of students felt that TCC was good at preparing them for transfer. As of fall 1998, 91% of students responding to the survey indicated that they were attending a four-year institution either full- or part-time, and 96% expected to complete their four-year degree.

Based on the results of the transfer survey, the large majority of students (94%) felt well prepared for transfer to a four-year institution and held favorable opinions about TCC. Nearly all students (99%) indicated that they would recommend TCC to a friend or acquaintance.

CONCLUSION

In conclusion, results showed that overall, TCC students who transferred to a four-year institution felt that the transition was uncomplicated. The majority of students reported that they experienced no major problems associated with transferring, and they indicated that all of their TCC credit hours were accepted. Students also felt that they were well prepared for the demands of a four-year institution.

Consistent with these self-perceptions, GPA performance data from four-year institutions showed that TCC transfer students were successful. Transfer student performance was above average or average during the first year of enrollment at the transfer institution. Overall, TCC students evidenced a smaller drop in GPA than the "transfer shock" average decline reported in the current literature (Diaz, 1992). On average, TCC students prepared in the Fine Arts curriculum exceeded their TCC GPA. Any GPA decline reported for other curricula was well under the -0.5 change expected.

The majority of TCC students transferred locally to ODU (64%). Forty-eight percent (48%) of these students earned a GPA of 3.0 or greater at ODU. Further, TCC's transfer students perform at a similar academic level compared to ODU's native students. The average GPA of TCC's transfer students at ODU was 2.76, and the average GPA of ODU native students was 2.57. Additionally, performance at many other transfer institutions was above average. Sixty-four percent (64%) of TCC students who

transferred to WM and 100% of students who transferred to VCU earned a GPA of 3.0 or greater. Fifty percent or more of TCC's transfer students attending NSU, VPI, and George Mason University (GMU) earned a GPA of 3.0 or greater.

Clearly, students attending TCC as freshmen and sophomores are well prepared for the baccalaureate experience. As indicated by GPA, their performance at the four-year institution is in line with their performance at TCC. TCC transfer students are competitive with students native to the senior institution and perform at above average ranges in a diversity of colleges and college programs.